



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Ben-Yehuda et al.

Confirmation No.: 5095

Application No.: 10/559,639

Attorney Docket No: 7640-X05-046

Filed: July 24, 2006

Group Art Unit: 1647

For: LIVIN-DERIVED PEPTIDES, COMPOSITIONS
AND USES THEREOF

Examiner: Elly Gerald Stoica

SUPPLEMENTAL RESPONSE TO OFFICE ACTION

Mail Stop: AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Supplemental to the Response filed on August 28, 2008, please enter the following additional amendments and remarks into the file of the above-identified application. The previous Response and the instant Supplemental Response are submitted in reply to the non-final Office Action mailed on May 29, 2008. In accordance with USPTO practice, each section of this Response begins on a separate sheet.

Amendments to the Claims

1-27. (Cancelled)

28. (Previously Presented) An isolated or synthetic livin-derived peptide selected from one of p30-Livin α and p28-Livin β , wherein said p30-Livin α peptide comprises the sequence as defined in SEQ ID NO:1 having pro-apoptotic activity, and wherein said p28-Livin β peptide comprises the sequence as defined in SEQ ID NO:2 having pro-apoptotic activity.

29. (Previously Presented) An isolated or synthetic peptide as defined in claim 28, wherein said p30-Livin α is denoted by the amino acid sequence as defined in SEQ ID NO:1 and said p28-Livin β is denoted by the amino acid sequence as defined in SEQ ID NO:2.

30. (Currently Amended) A ~~pharmaceutical~~ composition comprising as active ingredient at least one peptide as defined in claim 28 and a pharmaceutically-acceptable carrier.

31. (Currently Amended) A ~~pharmaceutical~~ composition as defined in claim 30, for inducing and/or enhancing apoptosis.

32. (Currently Amended) A ~~pharmaceutical~~ composition as defined in claim 31, wherein said apoptosis is induced by a treatment or agent selected from the group consisting of etoposide, anti-CD95/Fas, TNF α and staurosporine.

33. (Cancelled)

34. (Currently Amended) A ~~pharmaceutical~~ composition as defined in claim 31, for inducing apoptosis in malignant cells.

35-41. (Cancelled)

42. (Previously Presented) A plasmid comprising DNA encoding a p30-Livin α peptide as defined by SEQ ID NO:1 or a p28-Livin β peptide as defined by SEQ ID NO:2.

43. (Previously Presented) A viral vector comprising DNA encoding a p30-Livin α peptide as defined by SEQ ID NO:1 or a p28-Livin β peptide as defined by SEQ ID NO:2.

44. (New) An isolated or recombinantly-produced livin fragment, said livin fragment selected from one of p30-Livin α and p28-Livin β , said fragment having pro-apoptotic activity.

45. (New) A composition comprising as active ingredient at least one livin as defined in claim 44 and a pharmaceutically-acceptable carrier.

REMARKS

Claims 30-32 and 34 have been amended. New claims 44 and 45 have been added. Claims 27 and 35-41 have been cancelled. Claim 33 was cancelled in the previous Response. Claims 1-26 were cancelled in a Preliminary Amendment. Claims 28-32, 34, and 42-45 are presented for the Examiner's review and consideration. Applicants believe that the claim amendments and accompanying remarks herein serve to clarify the present invention and are independent of patentability. No new matter has been added.

Telephone Interview with the Examiner

Applicants thank the Examiner and the Examiner's mentor for courtesies extended to Applicants' representatives, Paul D. Bianco and Katharine Davis Wong, in the telephone interview of November 25, 2008. The amendments presented in this Response are the changes discussed and agreed upon in this interview.

Amendments to the Claims

No new matter has been added by the amendments to claims 30-32 and 34 made herein. These claims were amended only to clarify that the composition comprises at least two ingredients; a peptide as active ingredient and a pharmaceutically-acceptable carrier. *See* paragraphs [0012], [0013], [0016], and [0094]-[0096] of the published application (pages 4, 5, and 17 of the application as filed).

No new matter has been added by the addition of new claims 44 and 45.

New claim 44 discloses an isolated or recombinantly-produced livin fragment, the livin selected from one of p30-Livin α and p28-Livin β having pro-apoptotic activity. This subject matter is supported in the specification as originally filed. *See* paragraphs [0070], [0071], and [0093] of the published application (pages 10 and 17 of the application as filed).

New claim 45 clarifies that the livin of claim 44 can be included as an active ingredient in a composition with a pharmaceutically-acceptable carrier. *See* paragraphs [0016] and [0094]-[0096] of the published application (pages 5 and 17 of the application as filed).

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Conclusion

In light of the foregoing amendments and remarks, this application is now in condition for allowance and early passage of this case to issue is respectfully requested. If any questions remain regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

No fees are believed to be due with this submission. However, please charge any required fee (or credit overpayments) to the Deposit Account of the undersigned, Account No. 500601 (Docket No. 7640-X05-046).

Respectfully submitted,

/Katharine F. Davis Wong/

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